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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	BRASS, Volker, et al.	Confirmation No. 1726
U.S. SERIAL No.:	10/579,321	
FILING DATE:	January 8, 2007	
FOR:	Short Message for Voice Group Call Service	
ART UNIT:	2617	
EXAMINER:	HAMMONDS, Marcus C.	
CUSTOMER NO.:	27,388	

MAIL STOP APPEAL BRIEF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL UNDER 37 CFR 1.192

Sir:

This Brief on Appeal is submitted under 37 CFR § 1.192 on behalf of Appellant in the above-identified case from the final rejection of claims 1-6, 8-11 and 13-16. A Notice of Appeal was filed on March 22, 2010. This Brief is accompanied by the fee set forth in 37 CFR §1.17(c). If entry and consideration of the amendments above requires an extension of time, Applicants respectfully request that this be considered a petition therefor. The Assistant Commissioner is authorized to charge any fees or credit any overpayment to Deposit Account No. 14-1263.

I. Real Party In Interest

The Real Party in interest is T-Mobile Deutschland Gmbh, the assignee of record as of December 7, 2006 (Reel 018614/Frame 0675).

II. Related Appeals and Interferences

There are no prior or pending appeals, interferences or judicial proceedings known to appellant, appellants' legal representative or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

Claims 7 and 12 are canceled. Claims 1-6, 8-11 and 13-16 remain pending in the present application and are now under appeal, of which claims 1, 9 and 13 are independent claims. Claims 1-6, 8-11 and 13-16 have been rejected over the prior art. Specifically, claims 1, 3, 4, 5, 8 and 9 are rejected under 35 U.S.C. §103(a) as obvious over US Patent No. 6,138,011 (Sanders, III et al.) in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication"). Claims 2 and 6 are rejected under 35 U.S.C. §103(a) as obvious over Sanders, III et al. in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") and US Patent Publication No. 2003/0109269 (Laumen et al.). Claims 10 and 11 are rejected under 35 U.S.C. §103(a) as obvious over Sanders, III et al. in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") and US Patent No. 6,085,100 (Tarnanen). Claims 13-16 are rejected under 35 U.S.C. §103(a) as obvious over 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") in view of Sanders, III et al.. A copy of the claims is attached as the Appendix.

IV. Status of Amendments

The Amendment filed on January 22, 2010 subsequent to the issuance of the November 20, 2009 Final Office Action was entered by the Examiner in the February 22, 2010 Advisory Action. Thereafter, a second Amendment filed on March 22, 2010 subsequent to the issuance of

the November 20, 2009 Final Office Action was entered by the Examiner in the Advisory Action dated April 7, 2010.

V. Summary of Claimed Subject Matter

Independent Claim 1

Claim 1 is directed to a method for transmitting text and/or binary information representing a short message (SM) in addition to voice information for a talker and at least one listener of a Voice Group Call (VGC), as disclosed in the specification on page 2, lines 26-31. A special, dedicated signal is sent to all listeners and to the talker in a network {page 2, lines 28-31}, wherein the SM is addressed by an associated Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID) {page 3, lines 13-15}.

Independent Claim 9

Claim 9 is directed to a method for transmitting text and/or binary information representing a short message (SM) in addition to voice information for a talker and at least one listener of a Voice Group Call (VGC), as shown in Figures 1 & 2. A special, dedicated signal is sent to all listeners and to the talker in a network {page 2, lines 28-31}, wherein a Short Message Entity (SME)(e.g., a mobile station or a server) {page 5, line 4} in the network requests a short message Service Center (SC)(20) to send the SM to members of the VGC (MSn 22, MSm 24){page 5, lines 4-6}, the SC (20) interrogates a Group Call Register (GCR)(10a) in order to retrieve routing information of an Anchor - Mobile Switching Center (Anchor-MSC)(12a) for this VGC{page 5, lines 7-8}, the SC forwards the SM to the appointed Anchor-MSC (12a) for this VGC {page 5, lines 8-9}, the Anchor-MSC (12a) itself forwards the SM to all base station subsystems (BSS) partaking in the VGC and in addition to all Relay – Mobile Switching Centers (Relay-MSCs)(12b), the Relay-MSCs (12b) send the SM to all respective BSS for this VGC, which transmit it to the listeners {page 5, lines 9-11}.

Independent Claim 13

Claim 13 is directed to a mobile communication system, as shown in Figures 1 & 2 that includes at least one logical unit (mobile stations 22, 24, 26; mobile switching centers 12a-12c, 18) for controlling signal exchange between members (e.g., MSn 22 and MSm 24) of a Voice Call Group {page 5, lines 4-6}. The system also includes additional functional processing means (short message service center 20; Group Call Register 10a-10c) for transmitting text and/or binary information to one or more users of the Voice Call Group in a network {page 5, lines 4-11}, wherein the text and/or binary information will be addressed by an associated Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID){page 3, lines 13-15}.

VI. Grounds of Rejection to be Reviewed on Appeal

1. Whether claims 1, 3, 4, 5, 8 and 9 are rejected under 35 U.S.C. §103(a) as obvious over US Patent No. 6,138,011 (Sanders, III et al.) in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication")?

2. Whether claims 2 and 6 are rejected under 35 U.S.C. §103(a) as obvious over US Patent No. 6,138,011 (Sanders, III et al.) in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") and US Patent Publication No. 2003/0109269 (Laumen et al.)?

3. Whether claims 10 and 11 are rejected under 35 U.S.C. §103(a) as obvious over US Patent No. 6,138,011 (Sanders, III et al.) in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") and US Patent No. 6,085,100 (Tarnanen)?

4. Whether claims 13-16 are rejected under 35 U.S.C. §103(a) as obvious over 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") in view of US Patent No. 6,138,011 (Sanders, III et al.)? [***Note: The heading on page 12, paragraph 13 of the***

November 20, 2009 Final Office Action inadvertently states that claims 13-16 are rejected as obvious over Sanders, III et al. in view of the publication. In actuality, the publication was the primary reference which was modified by the teachings of Sanders, III et al. relied on as a secondary reference. The order of the references presented in the present grounds for rejection of claims 13-16 has been ordered in accordance with the detailed description of the rejection itself.]

VII. Argument

A. Claims 1, 3, 4, 5, 8 and 9 rejected under 35 U.S.C. §103(a) as obvious over US Patent No. 6,138,011 (Sanders, III et al.) in view of 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication")

1. Independent claim 1

Applicants submit that the prior art references either alone or in combination thereof fail to disclose or suggest "wherein the Voice Group Call reference represents a concatenated sequence of a group identification (ID) and a group call area identification (ID)," as called for in claim 1. (emphasis added)

Sanders, III et al. is directed to a method and apparatus for providing dispatch service to an existing telephone system. Short message service is acknowledged.

> "In addition to dispatch or group voice communications, the present invention also facilitates dispatch or group short message service. In this case, when the originating communication device 111 transmits its call request, it also transmits the short message (e.g., status update, message update, emergency alarm, or call alert) that is to be conveyed to the target devices 107-110. Upon receiving the call request and the short message, the MSC 118 provides the call request and the short message to the SMS processor 120 in accordance with known techniques. The SMS processor 120 forwards the call request and the short message to the dispatch controller 103, which, in turn, establishes communication links between itself and the target devices 107-110 of the originating communication device's talk group as described above. Once the links are established, the dispatch controller 103 transmits the short message to the target devices 107-110 via the SMS processor 120 and the established lines 126-127, 129-130." (Col. 7, ll. 10-27)

This passage does not describe the information used to establish the communication links. However, an earlier paragraph of Sanders, III et al. reads "Upon receiving the call request, the dispatch controller retrieves dispatch-related information from a database coupled to the dispatch controller based on either the originating device's ID or the target address. The dispatch-related information includes a talk group affiliation for the originating communication device. Based on

the retrieved dispatch-related information, the dispatch controller identifies a group of target communication devices for the dispatch call." (Col. 2, ll. 55-63)(emphasis added) Nothing in Sanders, III et al. either discloses or suggest that the "dispatch-related information" includes "a concatenated sequence of group identification and group call area identification," as called for in claim 1.

In the outstanding Office Action, the Examiner acknowledges that Sanders et al. alone falls short of reading on the present claimed invention set forth in claim 1. "Sanders teaches in col. 2, lines 55-63 dispatch related information for the talk group including a talk group affiliation for identifying target devices for establishing the communications links necessary for transmission of the short message, but Sanders fails to explicitly state wherein the SM will be addressed by an associated Voice Group Call reference representing a concatenated sequence of group identification (ID) and a group call area identification. However attention is directed to 3GPP TS 43.068 'Voice Group Call Service (VGCS); Stage 2' which teaches an associated Voice Group Call reference representing a concatenated sequence of group identification (ID) and a group call area identification (see 3GPP TS 43.068 'Voice Group Call Service (VGCS); Stage 2' Section 9.1 which explains identities for group calls such as a group call reference composed of a group ID and a group call area ID)." {November 20, 2009 Final Office Action: p. 4, l. 26 through p. 5, l. 9}(emphasis added)

Applicants submit that Sanders, III et al. expressly teaches away from such modification or combination. "It is improper to combine references where the references teach away from their combination." *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983) The publication is directed to VGCS which allows speech conversation of a predefined group of service subscribers in half duplex mode on the radio link taking into account multiple subscribers involved in the group call per cell. (3GPP TS 43.068 'Voice Group Call Service (VGCS); Stage 2: Section 1) In contrast, Sanders, III et al. in the Background of the Invention section of the application expressly identifies a problem or limitation associated with such conventional "dispatch radio communication systems" in that they "permit only one-half duplex telephone interconnect." (Col. 1, ll. 52-66)(emphasis added) The Sanders, III et al. invention overcomes

this limitation by permitting a full duplex group call. (Col. 2, l. 10). In accordance with the Sanders, III et al. patented invention, the call request is addressed based on dispatch related information received by a dispatch controller including a talk group affiliation for the originating communication device (Col. 2, ll. 47-63), not a Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID) as disclosed in the publication. Applicants therefore submit that Sanders, III et al. expressly teaches away from use of a half duplex telephone interconnection as disclosed in the publication.

2. *Dependent Claim 8*

Claim 8 states if the "talker is sending the SM and during the sending the talker intends to end his speaking, a Mobile Station (MS) will hold uplink until the SM is sent completely to the network." (emphasis added)

Applicants respectfully traverse this rejection on several grounds. First, claim 8 inherently calls for the simultaneous sending of SM and voice information. The uplink is held conditionally until the SM is sent completely to the network. Sanders, III et al. to which the Examiner relies in teaching transmission of both SM and voice does not disclose the two occurring simultaneously. To the contrary, either SM or a call is requested, but not both simultaneously. ("...cellular and public-switched telephone users can engage in dispatch or group calls, or send short messages to a group of target users...") (Col. 10, ll. 14-15)(emphasis added))

Second, the Examiner maintains that the limitation in dependent claim 8 is taught by sections 4.2.2.1, 11.4 and 11.5 of the publication entitled "3GPP TS 43.068 'Voice Group Call Service (VGCS); Stage 2." In particular, the Examiner asserts that these sections of the publication disclose "a voice group call with an uplink that that is only accessible by one user at any one time and it is released only upon reception of an uplink release message at the anchor mobile switching center from a base station controller. Thus, the current talker has exclusive access to the uplink channel while communicating to the network and the other target devices on the voice group call must wait for the uplink to become free." {November 20, 2009 Final Office

Action: p. 7, ll. 1-6}

As discussed above with respect to claim 1, Applicants submit that the two references are not combinable and thus has failed to establish a *prima facie* case of obviousness. Furthermore, even assuming, *arguendo*, that the references are combinable, the combination fails to render the present claimed invention obvious. The publication discloses that the current talker has exclusive access to the network while other devices in the voice group call must wait for the uplink to become free. However, the publication neither discloses nor suggests any relationship between the duration for which the uplink is held and the sending of the SM message, much less that the uplink be held until the SM is sent completely to the network, as found in claim 8. If the uplink of the voice group call was not held, then it would become free thereby terminating the current talker's access to the network whereby the free uplink could be accessed by other voice group call devices. Thus, what is disclosed in the publication is merely holding of the uplink of a voice group call irrespective of the transmitting of a SM. The publication is silent concerning transmission of short messages, thus if fails to expressly disclose, nor can it be inferred therefrom, any relationship between holding of the uplink until the SM is sent completely to the network. Modification of Sanders, III et al. as taught by the publication would result in a system wherein the voice group call is released only upon reception of an uplink release message, such release having no relation whatsoever to the SM, much less, that the SM has been sent completely to the network.

Independent Claim 9

Independent claim 9 states "wherein a Short Message Entity (SME) in the network requests a short message Service Center to send the SM to members of the VGC, the SC interrogates a Group Call Register in order to retrieve routing information of an Anchor - Mobile Switching Center (Anchor-MSC) for this VGC, the SC forwards the SM to the appointed Anchor-MSC for this VGC, the Anchor-MSC itself forwards the SM to all base station subsystems (BSS) partaking in the VGC and in addition to all Relay – Mobile Switching Centers (Relay-MSCs), the Relay-MSCs send the SM to all respective BSS for this VGC, which transmit

it to the listeners." (emphasis added)

Sanders, III et al. fails to disclose or suggest that "the SC interrogates the Group Call Register in order to retrieve routing information on an Anchor – Mobile Switching Center (Anchor – MSC) for this VCG." (emphasis added) To the contrary, Sanders, III et al. discloses (Col. 7, ll. 10-24) that the call request and the short message from the originating communication device is received by MSC 118 and forwarded to SMS processor 120 which, in turn, forwards the call request and short message to the dispatch controller 103 so as to establish communication links between itself and the target devices 107-110 of the originating communication device's talk group. In Sanders, III et al. every call request and short message, irrespective of the particular Voice Call Group, is sent from the SMS processor 120 to the dispatch controller 103. Assuming, *arguendo*, that the SMS processor 120 of Sanders, III et al. reads on the claimed "short message Service Center (SC)" while dispatch controller 103 reads on the claimed "Anchor-MSC., Sanders, III et al. still fails to disclose or suggest that SMS processor 120 interrogates a Group Call Register in order to retrieve routing information on the dispatch controller 103, as called for in claim 9. Such routing information to the dispatch controller 103 would be unnecessary since every call request and short message is routed from the SMS processor 120 to the dispatch controller 103, thus there is no need to obtain routing information to the dispatch controller for a particular Voice Group Call.

The Examiner acknowledges that this feature is not disclosed by Sanders, III et al. but submits that it is nevertheless obvious in view of the publication. As previously noted above with respect to claim 1, Sanders, III et al. expressly teaches away from being modified as taught by the publication to use a half duplex group call. Accordingly, since the references teach away from such modification or combination, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness.

B. Claims 13-16 are rejected under 35 U.S.C. §103(a) as obvious over 3GPP TS 43.068 "Voice Group Call Service (VGCS); Stage 2" ("the publication") in view of US Patent No. 6,138,011 (Sanders, III et al.)

1. Independent claim 13

Claim 13 is the system counterpart of independent method claim 1. Nevertheless, in the outstanding Office Action the grounds for rejection of claim 13 differs slightly from that of claim 1. Specifically, the ordering of the primary and secondary references is reversed among the two claims. Therefore, Applicants address the rejection of claim 13 independently of that of claim 1.

Applicants submit that the prior art references either alone or in combination thereof fail to disclose or suggest "the text and/or binary information will be addressed by an associated Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID)," as called for in claim 13. (emphasis added)

In the outstanding Office Action the Examiner acknowledges that the publication only discloses Voice Group Calls being addressed by a Voice Group Call Reference including a concatenated sequence of group identification and group area call identification, the reference failing to disclose or suggest short messaging. {November 20, 2010 Final Office Action: page 12, line 13 through page 13, line 19} Nevertheless, the Examiner states that this missing feature is taught by Sanders, III et al.

Applicants submit that the publication teaches away from being modified in accordance with Sanders, III et al. "It is improper to combine references where the references teach away from their combination." *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983) The publication is directed to VGCS which allows speech conversation of a predefined group of service subscribers in half duplex mode on the radio link taking into account multiple subscribers involved in the group call per cell. (3GPP TS 43.068 'Voice Group Call Service (VGCS); Stage 2: Section 1) In contrast, Sanders, III et al. in the Background of the Invention section of the application expressly identifies a problem or limitation associated with such conventional "dispatch radio communication systems" in that they "permit only one-half duplex

telephone interconnect." (Col. 1, ll. 52-66)(emphasis added) The Sanders, III et al. invention overcomes this limitation by permitting a full duplex group call. (Col. 2, l. 10) In accordance with the Sanders, III et al. patented invention the call request is addressed based on dispatch related information received by a dispatch controller including a talk group affiliation for the originating communication device (Col. 2, ll. 47-63), not a Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID), as disclosed in the publication. Applicants therefore submit that the references expressly teach away from such modification or combination.

2, Dependent Claim 15

Claim 15 states "a Short Message Entity (SME) in the network requests a short message Service Center (SC) to send the SM to members of the VGC, the SC interrogates a Group Call Register (GCR) in order to retrieve routing information of an Anchor - Mobile Switching Center (Anchor-MSC) for this VGC, the SC forwards the SM to the appointed Anchor-MSC for this VGC, the Anchor-MSC itself forwards the SM to all base station subsystems (BSS) partaking in the VGC and in addition to all Relay – Mobile Switching Centers (Relay-MSCs), the Relay-MSCs send the SM to all respective BSS for this VGC, which transmit it to the listeners."

The Examiner acknowledges that the publication is directed exclusively to VGCS and thus fails to disclose or suggest "a Short Message Entity (SME) in the network requests a short message Service Center (SC) to send the SM to members of the VGC," but asserts that Sanders, III et al. teaches this missing limitation. Applicants respectfully submit for the reasons discussed above with respect to claim 13, the references teach away from such combination. Therefore, the Examiner has failed to establish a *prima facie* case of obviousness.

3. Dependent Claim 16

Dependent system claim 16 contains a similar limitation to that discussed above with respect to dependent method claim 8. Accordingly, Applicants submit that claim 16 is patentable over the prior art of record for at least the same reasons discussed above with respect to claim 8.

VIII. CLAIMS APPENDIX

1. (Previously Presented) A method for transmitting text and/or binary information representing a short message (SM) in addition to voice information for a talker and at least one listener of a Voice Group Call (VGC), comprising the step of sending a special, dedicated signal to all listeners and to the talker in a network, wherein the SM will be addressed by an associated Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID).

2. (Previously Presented) The method according to claim 1, wherein the short message is sent in unacknowledged mode.

3. (Previously Presented) The method according to claim 1, wherein the special dedicated signal is a short message-mobile terminated (SM-MT).

4. (Previously Presented) The method according to claim 1, wherein the SM follows the structure of a regular Point-to-Point – Short Message Service in parallel to an ongoing Point-to-Point - Voice or Point-to-Point – Circuit Switched Data Call.

5. (Previously Presented) The method according to claim 1, wherein the SM is sent from the current talker to the network in form of a short message-mobile originated (SM-MO).

6. (Previously Presented) The method according to claim 5, wherein the SM-MO is sent in acknowledged mode.

7. (Canceled)

8. (Previously Presented) The method according to claim 1, wherein if the talker is sending the

SM and during the sending the talker intends to end his speaking, a Mobile Station (MS) will hold uplink until the SM is sent completely to the network.

9. (Previously Presented) A method for transmitting text and/or binary information representing a short message (SM) in addition to voice information for a talker and at least one listener of a Voice Group Call (VGC), comprising the step of sending a special, dedicated signal to all listeners and to the talker in a network, wherein a Short Message Entity (SME) in the network requests a short message Service Center (SC) to send the SM to members of the VGC, the SC interrogates a Group Call Register (GCR) in order to retrieve routing information of an Anchor - Mobile Switching Center (Anchor-MSC) for this VGC, the SC forwards the SM to the appointed Anchor-MSC for this VGC, the Anchor-MSC itself forwards the SM to all base station subsystems (BSS) partaking in the VGC and in addition to all Relay – Mobile Switching Centers (Relay-MSCs), the Relay-MSCs send the SM to all respective BSS for this VGC, which transmit it to the listeners.

10. (Previously Presented) The method according to claim 1, wherein the talker sends the SM via a Slow Associated Control Channel (SACCH) of a respective uplink-channel on a resource controlling Signaling Connection Control Part (SCCP) to a Mobile Switching Center (MSC), where the destination of the SM is either a Mobile Station International Integrated Services Digital Network Number (MSISDN) or a Voice Group Call – REFERENCE (VGC-REFERENCE).

11. (Previously Presented) The method according to claim 10, wherein by using the MSISDN the SM is forwarded to a short message Service Center (SC) and there it is handled according to normal PtP-SMS.

12. (Canceled)

13. (Previously Presented) A mobile communication system with at least one logical unit for controlling signal exchange between members of a Voice Call Group and with additional functional processing means for transmitting text and/or binary information to one or more users of the Voice Call Group in a network, wherein the text and/or binary information will be addressed by an associated Voice Group Call reference representing a concatenated sequence of a group identification (ID) and a group call area identification (ID).

14. (Previously Presented) The mobile communication system according to claim 13, wherein the text and/or binary information is a short message (SM).

15. (Previously Presented) The mobile communication system according to claim 14, further comprising a Short Message Entity (SME) in the network requests a short message Service Center (SC) to send the SM to members of the VGC, the SC interrogates a Group Call Register (GCR) in order to retrieve routing information of an Anchor - Mobile Switching Center (Anchor-MSC) for this VGC, the SC forwards the SM to the appointed Anchor-MSC for this VGC, the Anchor-MSC itself forwards the SM to all base station subsystems (BSS) partaking in the VGC and in addition to all Relay – Mobile Switching Centers (Relay-MSCs), the Relay-MSCs send the SM to all respective BSS for this VGC, which transmit it to the listeners.

16. (Previously Presented) The mobile communication system according to claim 14, wherein if a talker is sending the SM and during the sending the talker intends to end his speaking, a Mobile Station (MS) will hold uplink until the SM is sent completely to the network.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None

For at least the foregoing reasons, Appellant submits that claims 1-6, 8-11 and 13-16 are patentable over the prior art of record and passage of this application to issuance is respectfully requested.

Respectfully submitted,
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